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IS 6483 (2004): Tractors and Machinery for Agriculture and Forestry - Linch Pins and Spring Pins - Dimensions and Requirements [FAD 11: Agricultural Tractors and Power Tillers]

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“Knowledge is such a treasure which cannot be stolen”



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भारतीय मानक

ट्रैक्टर और मशीनरी कृषि और वानिकी हेतु — लिंच पिन और
स्प्रिंग पिन — आयाम और अपेक्षाएँ
(दूसरा पुनरीक्षण)

Indian Standard

TRACTORS AND MACHINERY FOR AGRICULTURE
AND FORESTRY — LINCH PINS AND SPRING
PINS — DIMENSIONS AND REQUIREMENTS

(*Second Revision*)

ICS 65.060.01

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BUREAU OF INDIAN STANDARDS
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NEW DELHI 110002

NATIONAL FORWARD

This Indian Standard (Second Revision), which is identical with ISO 7072 : 1993 'Tractors and machinery for agriculture and forestry — Linch pins and spring pins — Dimensions and requirements' issued by the International Organization for Standardization (ISO) was adopted by the Bureau of Indian Standards on the recommendations of the Agricultural Tractors and Power Tillers Sectional Committee and approval of the Food and Agriculture Division Council.

This standard was first published in 1972 and subsequently revised in 1981 based on DIS 7072. With the revision of ISO 7072 in 1993 it has been decided to revise this standard also.

In the adopted standard certain terminology and conventions are not identical with those used in Indian Standards. Attention is drawn especially to the following:

- a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'.
- b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

CROSS REFERENCE

In this Indian Standard, the following International Standard is referred to. Read in its respective place the following:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 683-14 : 1992 Heat-treatable steels, alloy steels and free-cutting steels — Part 14 : Hot-rolled steels for quenched and tempered springs	IS 4454 (Part 2) : 2001 Specification for steel wires for mechanical springs: Part 2 Oil hardened and tempered spring steel wire and valve spring wire — Unalloyed (second revision)	Not equivalent

For the purpose of deciding whether a particular requirement of this standard is complied with the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding of numerical values (revised)'. The number of significant places retained in the rounded off value, should be the same as that of the specified value in this standard.

Indian Standard

TRACTORS AND MACHINERY FOR AGRICULTURE AND FORESTRY — LINCH PINS AND SPRING PINS — DIMENSIONS AND REQUIREMENTS

(*Second Revision*)

1 Scope

This International Standard specifies the dimensions and certain requirements for linch pins and spring pins, which are used for the three-point hitch and for numerous fastening purposes in farm work and agricultural equipment.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 683-14:1992, *Heat-treatable steels, alloy steels and free-cutting steels — Part 14: Hot-rolled steels for quenched and tempered springs*.

3 Linch pins

3.1 Dimensions

Dimensions of linch pins shall be in accordance with figure 1 and table 1.

3.2 Requirements

The material of linch pins shall have a tensile strength of at least 500 N/mm^2 , and be so chosen that a linch pin can be bent 30° against a 5 mm radius without showing any cracks (see figure 2).

The pre-stress, F , of the spring-retaining device shown in figure 1 shall be 20 N to 30 N. The spring-retaining device shall withstand being opened 10 000 times without a noticeable reduction in pre-stress.

As regards finish of linch pins, any anti-corrosive treatment shall be by agreement with the manufacturer.

4 Spring pins

4.1 Dimensions

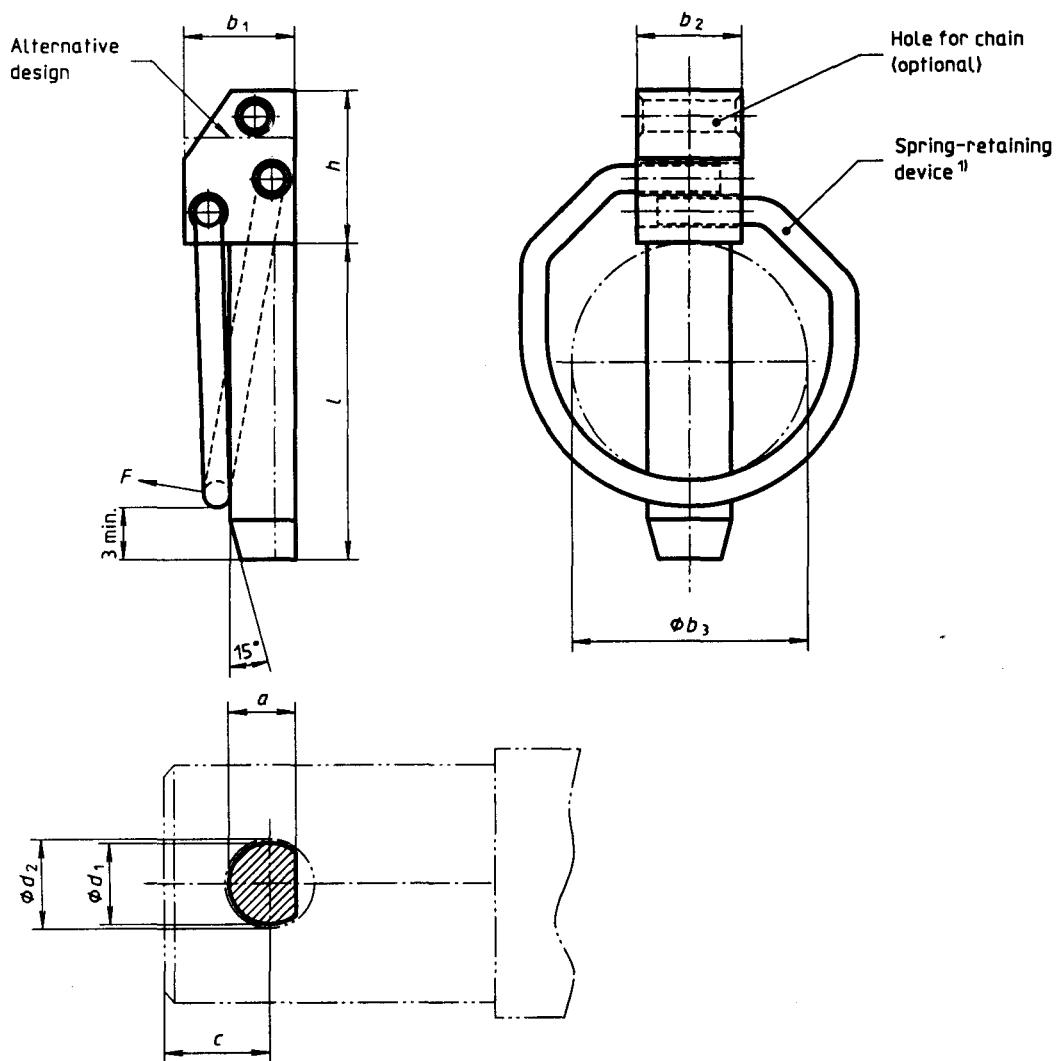
Dimensions of spring pins shall be in accordance with figure 3 and table 2.

4.2 Requirements

The material of spring pins shall be spring steel of type ... as specified in ISO 683-14:1992.

As regards finish of spring pins, any anti-corrosive treatment shall be by agreement with the manufacturer.

Dimensions in millimetres



1) Configuration of the ring is optional, but shall ensure that it does not rotate.

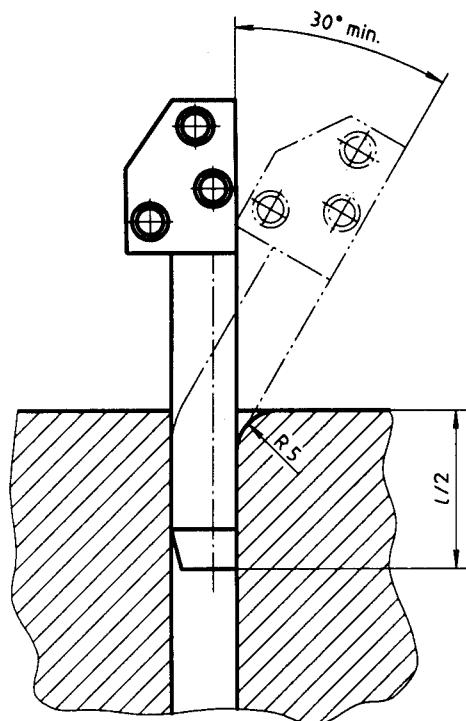
Figure 1 — Dimensions of linch pins

Table 1 — Dimensions of linch pins

Dimensions in millimetres

Nominal size	d_1	d_2	a	min.	b_1 max.	b_2 max.	b_3 min.	h max.	l	c max.
6	$5,5^{+0,3}_{-0,2}$	6	—	8	14	8	32	22	42	10
8	$7,5^{+0,3}_{-0,2}$	8	7	9	15	9	32	22	42	12
10	$9,5^{+0,3}_{-0,2}$	10	8	10	15	12	32	22	45	14
12	$11 \pm 0,5$	12	9	11	15	14	34	22	45	18
							45		55	
17	$16 \pm 0,5$	17	12,5	14	21	20	45	29	60	21

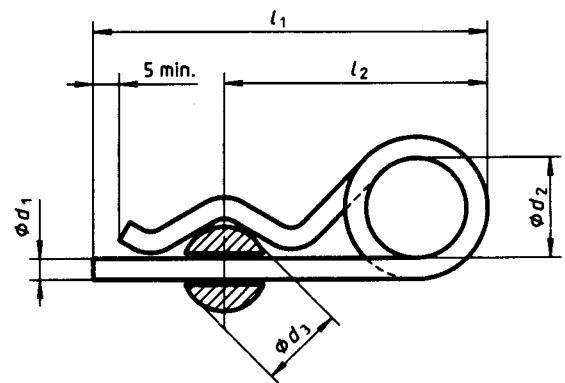
Dimensions in millimetres



NOTE — Values for l are given in table 1.

Figure 2 — Fixture for bending test

Dimensions in millimetres



NOTE — The eye of the spring pin may have one or more coils.

Figure 3 — Dimensions of spring pins

Table 2 — Dimensions of spring pins

Dimensions in millimetres

Nominal size	d_1	d_2	d_3 ¹⁾ min.	d_3 ¹⁾ max.	l_1 $+3$ 0	l_2 approx.
2 × 40	2	9	9	12	41	23
3 × 70	3	13	12	18	67	40
4 × 75	4	19	15	22	75	50
5 × 105	5	26	18	24	105	65
6 × 115	6	31	24	35	117	70
7 × 150	7	36	34	58	150	108
8 × 150	8	35	40	55	150	88

1) Recommended dimensions

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Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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